

## Claims

1. An artificial joint (1), especially to replace a human hip joint, comprising a condyle (2) and a joint socket (3), consisting of a socket part (3a) and an inlay (3b), whose associated functional surfaces (4, 5) are functionally interlinked, whereby at least one functional surface (5) is non-spherical in shape or conversely both can be formed non-spherically, whereby the orbital radii (6, 7) of each of the associated functional surfaces (5) or (4) differ from each other in a main functional plane relative to a secondary functional plane that is rotated by  $90^\circ$  with respect to the main functional plane, characterized in that, for purposes of individually adapting the artificial joint (1) to the patient, at least one of the functional surfaces (4, 5) can be affixed in different positions relative to the associated joint socket (3) or condyle (2).
2. The joint (1) according to claim 1, characterized in that a first functional surface (5) displays an asymmetry in the main functional plane as compared to the secondary functional plane while the second functional surface exhibits symmetrical functional planes.
3. The joint (1) according to claim 1 or 2, characterized in that the first functional surface (5) is associated with the joint socket (3) and the second functional surface (4) is associated with the condyle (2).
4. The joint (1) according to at least one of the preceding claims, characterized in that the first functional surface (5) is designed so as to be drum-shaped or spindle-shaped or oval.
5. The joint (1) according to at least one of the preceding claims, characterized in that, in order to set different positions, the functional surface (4, 5) can be affixed in different locking stages (8) relative to the associated joint socket (3a) or to the condyle (2).

6. The joint (1) according to at least one of the preceding claims, characterized in that the functional surface (4, 5) can be secured in different positions relative to the associated joint socket (3) or condyle (2) by means of a positive connection.
7. The joint (1) according to at least one of the preceding claims, characterized in that the functional surface (4, 5) can be affixed in different positions relative to the associated joint socket (3) or condyle (2) by means of a shrinkage connection.
8. The joint (1) according to at least one of the preceding claims, characterized in that the diameter of the functional surface (4, 5) of the condyle (2) or of the joint socket (3) in the frontal plane of the patient is to be dimensioned between 0.5 mm and 8 mm, especially 2 mm, greater than the diameter of the functional surface (4, 5) of the condyle (2) or of the joint socket (3) in the sagittal plane.
9. The joint (1) according to at least one of the preceding claims, characterized in that the functional surfaces (4, 5) are made of polyethylene.